

Guy's, King's and St Thomas' Cancer Centre

Having a sentinel lymph node biopsy and wide local excision for malignant melanoma

This information leaflet has been given to you to help answer questions you may have about sentinel lymph node biopsy and wide local excision. The leaflet explains what each surgical procedure involves and the benefits and risks of having them. If you have any further questions or concerns please feel free to speak to a member of your hospital team who would be happy to help.

What is a sentinel lymph node biopsy?

A biopsy is when a sample of body tissue is taken and looked at under a microscope to identify the cells and see how they are behaving. A sentinel lymph node biopsy is an optional surgical procedure to remove a node or nodes (glands) from your lymphatic system. These are then examined under a microscope. The procedure is done to see if there has been spread of a small number of melanoma cells to those glands. The cancer cells can be so small that they cannot be felt or seen on a scan and so the sentinel node biopsy is the most accurate way of detecting any spread of the melanoma cells.

What is the lymphatic system?

It is a system of channels in your body, which drains fluid from your tissues. Melanoma cells have been shown to spread mainly through these channels. Lymph is a milky fluid and is rich in the white cells which help us fight infections. It circulates around your body by passing through tiny, then larger vessels and lymph nodes (glands). Lymph nodes are arranged in groups (sometimes called draining basins).

They are found in your groin, under your arms and in your neck, as well as being deeper in your abdomen and chest. Each area of skin will drain lymph fluid into certain nodes, usually the group of nodes or draining basin which is closest. The first node the fluid drains into is called the sentinel node. Sentinel nodes act like police officers within the lymphatic system, checking what is passing through the body.

What does a sentinel lymph node biopsy involve?

It involves a surgical procedure to remove one or more of the nodes the lymph fluid drains into first and which are closest to the area where the melanoma has been found. For example, if the original melanoma is on the right calf of your leg, the sentinel lymph node is likely to be in your right groin. On the other hand, if the melanoma was on your right arm, the sentinel lymph node is likely to be in your right armpit. In areas like the trunk or head and neck, there may be more than one group of lymph nodes involved.

Who does the sentinel lymph node biopsy?

A specially trained plastic surgeon will do it. The plastic surgeons at Guy's and St Thomas' are part of the melanoma multidisciplinary team (MDT).

This is a team of health professionals, specialising in different areas of patient care, consisting of dermatologists, surgeons, pathologists, a doctor specialising in cancer treatment and specialist nurses.

Your individual situation will be discussed by the team before your clinic appointment. All members of the team are available to talk to you about what is involved and answer any questions you may have before you decide whether to go ahead with any treatment.

Involving you in your care

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This confirms that you agree to have a sentinel lymph node biopsy and you understand what this involves. You should also receive a copy of the leaflet, **Helping you decide: our consent policy**, which gives more information. If you do not receive one, please ask.

What happens before the sentinel lymph node biopsy?

You will be asked to come to hospital the day before your biopsy for a scan called lymphoscintigraphy. This finds the lymph node(s) which will be removed the next day. It is done in the Nuclear Medicine Department.

You will be asked to lie down and small injections containing a substance called a 'tracer' are injected around the original melanoma site. It is called a tracer because it is slightly radioactive and can be picked up or 'traced' using a special scanner called a gamma probe.

Although the word radioactive may sound alarming, it is completely safe.

The tracer drains into your lymphatic channels and then to your lymph nodes. Whichever lymph node(s) the tracer drains into first is the sentinel lymph node(s). A type of x-ray picture is taken and the skin over the sentinel node is marked to help the plastic surgeon find the sentinel lymph node(s) easily and make his incision (cut) in the right place when you have your biopsy.

This scan normally takes about 90 minutes, sometimes more, depending on where the melanoma is and where the lymph nodes involved are. Afterwards you will be asked to go to the admissions department to book your hospital stay.

What happens during the sentinel lymph node biopsy?

The biopsy is performed under general anaesthetic. This is a medicine that makes you unconscious (asleep) so you do not feel any pain. There can be risks involved with having a general anaesthetic but they are small. An anaesthetist will see you before the biopsy to make sure you are fit enough for a general anaesthetic.

You should also receive a copy of the leaflet **Having an anaesthetic**. If you have not, please ask your doctor or nurse for a copy.

Please do not **eat anything for six hours** or **drink anything for four hours** before your procedure.

If you have food or drink in your stomach when you have the anaesthetic, there is a higher risk of you being sick while unconscious.

Once you are unconscious, you will have another injection around the original area of the melanoma but this time with a blue dye. The blue dye travels along your lymphatic channels to the sentinel lymph node(s).

Lymph nodes look like bunches of grapes; the blue dye helps the plastic surgeon to see the sentinel lymph nodes and make sure the correct nodes are removed (cut out).

Sometimes (very rarely) we are unable to identify the sentinel lymph node during the procedure or it may not be possible to adequately analyse the node which has been removed.

After the lymph node(s) has been removed your surgeon will remove more tissue from around the area the melanoma was found. This is called a wide local excision.

What is a wide local excision?

At this stage, the original melanoma will have been previously removed and there might be a small scar from the original skin biopsy.

It is important the tissue around the original area of melanoma is also removed; this is a wide local excision. Wide local excisions are important as they remove any stray cancer cells which may have been left behind. This lowers the risk of a melanoma returning in the future. Your doctor will discuss with you how much skin needs to be removed, as the recommended margin depends on the thickness of the original melanoma.

Wide local excisions are normally done at the same time as the sentinel lymph node biopsy. Your plastic surgeon will talk through how they will remove the extra tissue and how your wound will be repaired afterwards.

Sometimes this involves moving skin around next to the wound to cover it (a skin flap). Or taking skin from somewhere else such as, your thigh or buttock to cover the wound, this is known as a skin graft.

What are the advantages of a sentinel lymph node biopsy?

Sentinel lymph node biopsy is not a treatment but it does give more information about the stage (where the cancer is) of your disease. It provides you and your doctor with the most accurate information about the risks of your melanoma returning and what the future may hold for you.

Are there any risks with sentinel lymph node biopsy and wider excision?

- **infection.** As with all operations, there can be a risk of infection. The plastic surgeon and your medical team will do everything they can to reduce this risk. You may notice after surgery your wound becomes red, tender and swollen – this is not unusual and should improve. If you notice signs of infection, such as inflammation, or your wound becomes very red and hot, or you have a raised temperature, please contact your doctor. You may need antibiotics to treat an infection.
- **seroma.** Sometimes a pocket of fluid will collect in the area which has been operated on – this is called a seroma. It happens because your drainage system has been interrupted. Signs of a seroma can be swelling, a feeling of fluid moving in the area and discomfort. This usually settles down by itself after a couple of weeks. In some severe cases you may need to come back to the hospital to have it drained with a needle.
- **stiffness** or limited movement in the affected arm or leg afterwards is common and will improve the wound heals. Your medical team will tell you how and when to move the limb.
- **scars.** Treatment for melanoma requires different surgical methods such as incisions, excisions (cutting out), skin flaps and skin grafts, so it is quite common to have scarring left on your skin. Your plastic surgeon and nursing team will advise you about skin care before you go home.
- **discomfort.** You may experience some discomfort afterwards. This will improve as your wounds heal. Your doctor will prescribe painkillers to help ease any pain.
- **numbness or tingling around the wound.** This should return to normal as your body heals. If you become worried, please contact your medical team.
- **blue/green urine.** As the radioactive tracer and dye are flushed from your body, you may notice the blue dye when you pass urine. This will last for 24 to 48 hours before returning to normal.
- **allergy.** There is a small risk of an allergic reaction to the blue dye. Your surgeon will look for signs of allergy while you are unconscious. If you do have a reaction, you will be given medication to reverse the effects of the dye and be closely monitored.
- **lymphoedema.** Rarely, the affected arm or leg can become swollen. This is called lymphoedema and is diagnosed by a doctor or specialist nurse. It may be temporary or in some cases, permanent. There are lymphoedema specialist nurses available at Guy's and St Thomas' who can help you manage and improve symptoms of lymphoedema. Please ask your medical team to refer you to the lymphoedema specialist nurse, if needed.

If you are worried about any of these risks, please do not hesitate to talk to a doctor or nurse involved in your care.

What happens if I decide not to have a sentinel lymph node biopsy?

Sentinel node biopsy is not a treatment for melanoma and is done to gain more information. If you would prefer not to have this done, you do not have to. This decision in no way affects your treatment. You will still be offered a wider excision. This is standard treatment for melanoma and it is likely your doctors will advise you to have this. You will also be offered regular follow-up appointments, so you can be monitored by the melanoma team.

What happens after the procedure?

You should expect to stay in hospital for one or two nights. The anaesthetic may make you clumsy, slow and forgetful for about 24 hours. Although you may feel fine, your thought processes, reflexes, judgment and coordination can be affected for 48 hours after the biopsy.

The affected area(s) is likely to have stitches and be covered by a dressing. You will be advised how to care for your wound before leaving the ward.

The ward staff will arrange an outpatient appointment for you to attend the plastics dressing clinic for wound care management. After going home, it is important you see your doctors again to discuss further treatment and arrange follow up care. You will have outpatient appointments with your plastic surgeon and your dermatologist within three weeks after leaving hospital. Please ask the ward staff to check both appointments have been made before leaving.

What happens to the sentinel lymph nodes when they have been removed?

The sentinel lymph nodes(s) are sent to our laboratory to be examined under a microscope. The results take between 10 to 14 days. They will be discussed with you during your next clinic appointment.

Your team of doctors or specialist nurse will be happy to discuss this with you in more detail.

What happens if the sentinel node contains melanoma cells?

If the sentinel node(s) contain melanoma cells your doctor will discuss your treatment options with you. This will help you to make an informed decision about what treatment to have. This could involve an operation called a “completion lymphadenectomy or “lymph node clearance”, where the remaining lymph nodes are removed from the affected area and examined in our lab. The results and any further treatments would then be discussed with you. Alternatively, you may be offered to join a clinical trial.

Whichever treatment you have, your progress will be monitored with regular appointments at St John's Institute of Dermatology.

What happens if the sentinel node biopsy is negative?

If the sentinel lymph node(s) does not contain any melanoma cells, you will not need any further surgery. You will still need regular hospital appointments so we can closely monitor you. These appointments are usually shared between St John's Institute of Dermatology and the hospital/dermatologist that referred you to us.

What research and clinical trials options are there?

Doctors and medical researchers are trying to improve the investigation and treatment of melanoma. You may be offered the chance to take part in a research or clinical trial.

You do not have to take part and if you decide not to, this will not affect your care in any way. Your doctor will discuss this with you if you are eligible. Please do not hesitate to talk to your doctor if you would like more information on research or clinical trials.

Contact us

At different times you may need to contact different members of the team or departments in the hospital. Here is a list of useful contact numbers. If you have any questions or concerns, please do not hesitate to contact a member of the team.

To use the bleep system, please telephone **Guy's and St Thomas' switchboard** on **020 7188 7188**, ask for the bleep desk, and then ask for the bleep number you need.

Your clinical nurse specialist (CNS) is available for support and advice, and can also help by liaising between patients, relatives, GPs and hospital doctors. Support from a CNS is available for all patients as soon as they have been diagnosed.

Patient pathway coordinator

Becky Roles

t: 020 7188 7188 ext 51633 (Monday to Friday, 9am to 5pm)

e: rebecca.roles@gstt.nhs.uk

Plastic surgery consultants

t: 020 7188 5130 (Monday to Friday, 9am to 5pm)

Melanoma support group

Meets at Guy's Hospital every two months after the melanoma clinic between 1.30 to 3pm. Please contact your CNS for details.

Plastic dressing clinic nurses

t: 020 7188 7270 (Monday to Friday, 9am to 5pm)



Dimbleby Cancer Care is the cancer support service for Guy's and St Thomas'. They have drop-in information centres, and also offer complementary therapies, psychological support and benefits advice.

Drop-in information centres are located at Guy's in Oncology Outpatients (Ground floor, Tabard Annexe) and at St Thomas' on the Lower Ground Floor, Lambeth Wing.

t: 020 7188 5918 **e:** RichardDimblebyCentre@gstt.nhs.uk

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

PALS – To make comments or raise concerns about the Trust's services, please contact our Patient Advice and Liaison Service (PALS). Ask a member of staff to direct you to PALS or:

t: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language support services – If you need an interpreter or information about the care you are receiving in the language or format of your choice, please get in touch using the following contact details:

t: 020 7188 8815 **fax:** 020 7188 5953 **e:** languagesupport@gstt.nhs.uk

Knowledge & Information Centre (KIC) – For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

t: 020 7188 3416

Become a member of your local hospitals, and help shape our future

Membership is free and it is completely up to you how much you get involved. To become a member of our Foundation Trust, you need to be 18 years of age or over, live in Lambeth, Southwark, Lewisham, Wandsworth or Westminster or have been a patient at either hospital in the last five years.

To join, please call 0848 143 4017, email members@gstt.nhs.uk or visit www.guysandstthomas.nhs.uk

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